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Management of Environmental Restoration Project Wastes

Prepared by	PATRICIA M TILLEY (Print Name)	Patricia M Tilley (Signature)	3/27/96 (Date)
Quality Review by	Patricia F. Goulding (Print Name)	[signature] (Signature)	4/8/96 (Date)
Technical Review by	Larry Maassen (Print Name)	Larry Maassen (Signature)	4/18/96 (Date)
PM Approval	JORG JANSEN (Print Name)	[signature] (Signature)	4-19-96 (Date)
QPPL Approval	LAWRENCE A. SOUZA (Print Name)	[signature] (Signature)	4/19/96 (Date)

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MANAGEMENT OF ENVIRONMENTAL RESTORATION PROJECT WASTES

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1.0 PURPOSE

This procedure is used for identifying, minimizing, segregating, storing, disposing of, and treating Environmental Restoration (ER) Project-derived wastes at Los Alamos National Laboratory (Laboratory), and for preparation and management of all required documents associated with waste generation. ER Project activities that plan and result in the generation of waste include site investigations, corrective actions, and decommissioning.

2.0 SCOPE

This procedure applies to all field activities that generate or manage waste under the ER Project and to all Laboratory and contractor personnel involved in these field activities. The procedure is applicable from the time of waste generation through management, final disposal, and release by the ER Project. Waste management must follow the Laboratory Spill Prevention Control and Countermeasures Plan; the Radioactive Materials Management Area Plan; and the Water Quality and Hydrology Group's (ESH-18) notice of intent reporting requirements.

This procedure does not supersede the applicable Laboratory Administrative Requirements (ARs). The following ARs direct the management of waste:

- AR 10-1, Radioactive Liquid Waste
- AR 10-2, Low-Level Radioactive Solid Waste
- AR 10-3, Hazardous and Mixed Waste
- AR 10-4, Polychlorinated Biphenyls
- AR 10-5, Transuranic (TRU) Solid Waste
- AR 10-8, Waste Minimization
- AR 10-9, Waste Profile Form

3.0 DEFINITIONS/FORMS

3.1 Definitions

Accumulation Date: The date the hazardous waste was generated, and placed in storage containers for <90-day storage, or the date that the waste collected in a Satellite Storage Area exceeds 55 gal. of hazardous waste or 1 gal. of acutely hazardous waste.

Hazardous waste: Waste that is regulated under Resource Conservation and Recovery Act (RCRA) and defined in 40 CFR 261.3.

Indigenous media: Natural materials, such as borehole cuttings, rock, sediment, organic materials, or groundwater displaced during investigations, corrective actions, and decommissioning activities.

Industrial wastes: Solid waste generated by manufacturing or industrial process that is not hazardous waste regulated under Subchapter I of 40 CFR. Such wastes may include fertilizer chemicals; inorganic and organic chemicals; miscellaneous plastic products; and glass, clay, and concrete products. This term does not include mining waste or oil and gas waste.

Low-level radioactive waste: Waste that contains added radioactivity but is not high-level, transuranic, nor spent fuel. Material used in research may be classified as low-level waste provided the concentration of transuranics is <100 nCi/g.

Mixed waste: Hazardous waste containing added radioactivity.

Municipal refuse waste: Nonradioactive, nonhazardous solid wastes that may be disposed of at a sanitary solid waste landfill.

Special wastes: Solid wastes that have unique handling, transportation, or disposal requirements, including the following:

- treated formerly characteristic hazardous wastes,
- asbestos waste,
- ash,
- infectious waste,
- sludge,
- industrial solid waste,
- spill of chemical substance or commercial product,
- dry chemicals that become characteristic hazardous waste when wetted, and
- petroleum-contaminated soils.

Transuranic (TRU) waste: Waste that is contaminated with alpha-emitting transuranium radionuclides with half-lives >20 years and concentrations >100 nCi/g.

3.2 Forms

Chemical Waste Disposal Request (CWDR) Form: The form used by Chemical and Mixed Waste Management (CST-5) for arranging the collection and disposal of waste. Contact CST-5 for a copy of the form.

Waste Characterization Strategy Form (WCSF): The form, from the Justification of Characterization Strategies for Wastes Generated by the Environmental Restoration Project (LANL 1995), that identifies process knowledge and proposed strategies for characterizing each waste stream. The WCSF is included in LANL-ER-SOP-1.10, Waste Characterization.

NOTE: The Waste Characterization Strategy Form must be completed and submitted to CST-5 and the Hazardous and Solid Waste Group (ESH-19) for review and approval **before** wastes are generated. The Waste Characterization Strategy Form may be amended after the generation of the waste if new information and data warrant.

Waste Profile Form (WPF): The form completed by generator and the Waste Management Coordinator (WMC), used by CST-5 to assign waste codes. The WPF must be submitted to CST-5 prior to waste disposal. See AR 10-9 for instructions and routing.

4.0 RESPONSIBILITIES

The responsibilities outlined below are for Laboratory ER Project purposes and do not necessarily meet regulatory definitions or requirements.

4.1 Field Project Leader

The Field Project Leader (FPL) retains the ultimate responsibility as waste generator and is responsible for the implementation of this procedure, but the FPL may designate other project personnel to act on behalf of the FPL as generator. The FPL ensures that a trained WMC is assigned to the waste-generating activity. The FPL also ensures that the Field Team Leader (FTL) is trained in the management of wastes generated during ER activities. The FPL is also responsible for providing current input into the Waste Projection Database.

4.2 Field Team Leader

The FTL is responsible for on-site field activities. With the assistance and expertise of the WMC, the FTL directs the waste management, including waste segregation, documentation, testing, storage, and disposal.

4.3 Waste Management Coordinator

The WMC is the individual with the overall functional responsibility for wastes generated within the field unit. The WMC is the primary waste management point-of-contact for the ER field unit and provides a full range of waste-related support and services. The roles and responsibilities of the WMC include the following:

- Acts as primary waste management liaison between the field unit and CST-5.
- Represents the field unit during audits and assessments.
- Helps waste generators ensure regulatory compliance at hazardous and radioactive waste storage areas.
- Initiates actions to prevent and eliminate noncompliance with regard to waste management issues.
- Helps FPL comply within the requirements of Laboratory policies, U.S. Department of Energy Orders, and state and federal regulations. These requirements include those of the U.S. Department of Transportation (DOT), Environmental Protection Agency (EPA), and the New Mexico Environment Department (NMED), Part B permits, and best management practices.
- Provides information to waste generators so they are aware of applicable regulations regarding radioactive, chemical, hazardous, and mixed waste.
- Provides information to waste generators regarding Toxic Substance Chemical Acts (TSCA) and New Mexico special wastes.
- Assists the waste generator with the responsibilities listed in Section 4.4.
- Performs weekly inspections of satellite accumulation areas.
- Is responsible for the operations associated with <90-day storage areas.
- Provides periodic updates of the Drum Tracking Database to the ER Project Office.
- Coordinates the transportation of waste from the ER site.
- Assists waste generator in waste minimization/pollution prevention techniques.
- Assists waste generator with completion of the WCSF, the WPF, and the CWDR.
- Helps prepare and review waste management sections of standard operating procedures, waste minimization plans, and other related documentation.
- Attends required training and quarterly WMC meetings.
- Is responsible for disseminating waste management information to the waste generators.
- Notifies appropriate personnel of any spills, releases, leaks, or discharges.

- Coordinates the resolution of waste management issues on behalf of the field unit.

4.4 Waste Generator

The roles and responsibilities of the waste generators are as follows:

- has responsibility for all waste from time of generation to final disposal;
- knows their wastestreams and anticipates changes in those wastestreams.
- ensures accurate completion of the WCSF, the WPF, and the CWDR;
- notifies appropriate personnel of any changes that affect the characterization or certification of wastestreams (i.e., changes in character or process of waste, etc.);
- applies all appropriate waste minimization techniques;
- initiates and signs waste management documentation as appropriate or required;
- ensures proper storage and maintenance of logs for satellite accumulation areas and <90-day storage areas;
- completes Laboratory-required waste management training; and
- notifies appropriate Laboratory personnel of any waste leaks, releases, spills, or discharges.

5.0 EQUIPMENT

Typical equipment for managing wastes would be the following:

- appropriate waste containers (e.g., B-25 boxes, 55-gal. drums, liquid tank, plastic bags);
- necessary tools (e.g., fork lifts, hammers, wrenches);
- marking and labeling supplies;
- staging supplies (e.g., pallets, plastic sheeting, tarps, rope, stakes, spill containment);
- appropriate personal protective equipment (PPE); and
- field screening instruments.

6.0 PROCEDURE

ER activities generate the following types of waste materials:

- corrective action materials, including contaminated soil, water, sludge, building rubble, and asphalt;

- disposable PPE and other equipment requiring disposal;
- indigenous media;
- investigation derived materials;
- decontamination liquids;
- solid wastes generated outside the contamination reduction or exclusion zones (assumed to be free of contamination unless conditions warrant otherwise); and
- returned samples.

6.1 Cautions

Hazards (i.e., chemical, radiological, and physical) at each site are addressed in the site-specific health and safety plan. Be sure to follow it while managing wastes at the site. Waste management hazards that are not addressed in the site-specific health and safety plan (i.e., pinch points, drum and container lifting and moving, etc.) must be addressed in tailgate safety meetings.

6.2 Waste Generation

All available information about potential contaminants and site characteristics must be used to characterize waste and to minimize mixing of different waste classes.

6.2.1 Characterization

A. A characterization strategy must be in place for all wastes before they are generated. The WCSF (see LANL-ER-SOP-1.10, Waste Characterization) must be completed at this time. Estimated volumes, expected waste types and categories, sampling strategies, storage containers, and inspections are all addressed in this form.

B. Be sure that proposed characterization of the waste is adequate for storage and/or disposal.

C. If the waste is hazardous or potentially hazardous, the waste must be characterized and prepared for final storage or disposal within 90 days after generation of the waste.

6.2.2 Segregation and Minimization

Proper waste segregation is required for storage, treatment, or disposal and is critical for waste minimization.

A. Waste minimization is the initial requirement for segregation determination. Follow implementation specifications in AR 10-8, Waste Minimization. Waste minimization techniques include

- conducting routine briefings to discuss minimization;
- returning indigenous media to original source during site investigation activities, if possible;
- reusing equipment and PPE whenever possible;
- decontaminating equipment and PPE instead of or before discarding;
- cutting contaminated portions from disposable PPE and treating only the contaminated portions as contaminated waste;
- using dry decontamination techniques before decontamination rinses;
- avoiding the use of solvents for decontamination;
- using spray bottles for decontamination rinses;
- wastae avoidance; and
- recycling.

B. All waste categories must be segregated, if possible, to prevent cross-contamination. The following categories can be generated during ER activities and must be segregated:

- hazardous wastes;
- low-level radioactive wastes;
- TRU wastes (could be present in decommissioning wastes);
- mixed wastes;
- indigenous media (not a separate category but is indicated separately here because there are options for waste management, provided it meets the identified criteria);
- regulated chemical wastes [e.g., polychlorinated biphenyl (PCB) waste, asbestos];
- special wastes (e.g., petroleum- and ash residue-contaminated soil); and
- municipal refuse waste.

C. Liquid and dry wastes must be segregated, even if they are from the same source.

6.3 Waste Storage

Adequate space, containers, segregation, and labeling are all required for storage of ER wastes. Use storage containers that are appropriate for the waste and that will meet requirements for storage, inspection, handling, transportation, and disposal. Usually waste that is stored must be transported and managed for final disposal, and it would be proactive to use waste containers that meet all requirements for their expected uses.

A. Prepare the area for waste storage before generating the waste. Because requirements differ for differing waste types, follow specific instructions for the waste type being generated.

B. Describe the location of the waste storage area in the waste management plan, the characterization strategy form, or other appropriate document.

C. If the material is suspect hazardous or radioactive, it must be labeled and stored as indicated below for the specific waste type.

D. Label the container if the waste is being stored pending analysis for determination of status as hazardous wastes. The label should include such information as

- accumulation start date,
- name and phone number for contact,
- site and potential release site (PRS) number,
- sample numbers, and
- waste matrix.

E. Enter appropriate information into the Drum Tracking Database and forward to the ER Project office at least weekly.

6.3.1 Hazardous Waste

All soils, water, decontamination fluids, PPE, equipment, and building and decommissioning debris that are contaminated with qualifying hazardous waste must be managed to comply with hazardous waste regulations (see Section 3.1). Follow instructions in AR 10-3, Hazardous and Mixed Waste.

A. Accumulation Areas. Store all hazardous waste in satellite accumulation areas, <90-day storage areas, or RCRA-permitted storage areas.

Because of limited space at the Laboratory's storage areas and the large volumes of hazardous ER waste generated during some activities, most ER waste must be stored in <90-day storage areas until analytical results are obtained and final disposal is arranged.

B. Notification. Register the < 90-day storage area with ESH-19. Weekly inspections for container deterioration, leaks, and spills must be documented and the inspection forms submitted to ESH-19.

If the 90 days will be exceeded because of unforeseen, temporary, or uncontrollable events, provide ESH-19 with a written request for a 30-day extension at least two weeks before the 90-day limit is reached. This extension request must indicate the reason the waste cannot be moved to a RCRA-permitted or interim-status unit at the Laboratory.

C. Secure Areas. Store hazardous wastes in a secured area to prevent inadvertent or accidental intrusion and exposures. ("Secured area" means that the waste is under the control of the generator; this can be a security area or an area that is fenced and locked.)

D. Waste Containers. Place hazardous wastes in containers with tight lids. Containers holding liquids must be sealed and provided with secondary containment in a manner that allows the primary container to be inspected. The containers must be placed in 2-ft aisle spaces to allow for inspection and emergency personnel access. Wastes must be stored according to compatibility concerns; if ignitable wastes are present, the waste must be stored away from ignition sources.

E. Labels. Label the containers with **"Hazardous Waste"** and indicate the major hazardous constituent(s); for < 90-day storage, the waste accumulation date must be indicated.

F. Explosive Wastes. Remove all visible pieces of high explosives (HE) before placing the soil in containers. The containerized HE should be managed by the explosives host group. Follow guidance in AR 6-6, Explosives, and all directives of the explosives host group.

The explosives groups are currently working with ER and CST-5 to implement a program for disposal of soil containing HE. If the soil has >5% HE by weight, the explosives groups will not allow the soil to leave the site for safety reasons. If the soil has <5% HE by weight, the material is considered non-reactive.

6.3.2 Low-Level Radioactive Waste

Low-level radioactive waste must be stored in a secure area to prevent inadvertent or accidental intrusion and exposures. Radioactive waste does not have to be permanently disposed of or placed within a storage or disposal unit within a specified time. However, best management

practice would be to provide for disposal within a reasonable time, for instance, six months.

A. Liquids. Radioactive liquid waste water must be contained in a closed container. If the liquid is to be moved, the waste could be contained in DOT-approved 55-gal. containers, tuff tanks, or tanker trucks. Small amounts of radioactive liquid waste may be taken to Technical Area (TA) 50 for disposal at the Radioactive Liquid Waste Treatment Facility. Contact the Radioactive and Industrial Wastewater Treatment Science Group (CST-13) for specific instructions. Follow guidance provided in AR 10-1, Radioactive Liquid Waste.

B. Solids. The radiation control technician can assist in making a preliminary decision regarding the radionuclide concentration level based on LANL-ER-SOP-10.07, Field Monitoring for Surface and Volume Radioactivity Levels, guidance in LANL-ER-SOP-01.03, Handling, Packaging, and Shipment of Samples, and guidance in AR 10-2, Low-Level Radioactive Solid Waste.

   - If the bulk solid low-level radioactive waste has a radionuclide concentration <2 nCi/g, store the waste in strong, tight containers that can eventually be moved for disposal. Most ER activities will produce only waste that is <2 nCi/g.
   - If the radionuclide concentration is > 2 nCi/g, store the waste in containers that meet DOT requirements for waste transportation. Contact the Laboratory transportation services or Solid Radioactive Waste Management Group (CST-14) for information regarding the correct type of containers.

C. Labels. The container holding low-level radioactive waste must be marked "CAUTION, RADIOACTIVE WASTE" using the Laboratory's standard tape. The container label must include the description and origin of waste, the container contact and 1-m exposure rates in mrem/hr, and the name of the waste generator.

Note: Because of disposal restrictions, solid low-level radioactive wastes must be kept dry.

6.3.3 TRU Waste

Storage requirements for TRU waste are stringent because of safety and security considerations. The amount of waste that can be placed in any container is limited by the radionuclides present, the combined activity of the radionuclides, and the gases and heat that can be produced; other considerations are DOT container and weight requirements. Follow the guidance in AR 10-5, TRU Solid Waste, and contact CST-14; for assistance if you expect to generate TRU waste.

6.3.4 Mixed Wastes

Mixed wastes must follow requirements for both hazardous and radioactive wastes (see Sections 6.2.1 and 6.2.2). If generation of low-level mixed waste is suspected based on site history or characterization, every effort should be made to sample the contaminated media *in situ* and request expedited turnaround for all analytical parameters. CST-14 and CST-5 will advise about offsite waste acceptance criteria for final disposal.

6.3.5 Indigenous Media

Indigenous media that are displaced during investigations may be returned to the area of origin under certain circumstances. The ER Project's policy for returning materials to the site of origin is based on Comprehensive Environmental Response Compensation and Liability Act and EPA RCRA facility investigation guidance (EPA 1992). The policy is applicable only during the investigation or characterization process. The management of uncontaminated indigenous media that is displaced during corrective actions may be handled in the way described below. Document all decisions regarding the management of indigenous media in either the Field Log Book or the Daily Activity Sheet if it has not been documented elsewhere.

Contaminated indigenous media generated during corrective actions are wastes and must be managed according to the requirements of the specific waste type that is contaminating the media.

Be sure that the media are not placed where erosion could carry the media, contaminated or not, to a surface watercourse.

A. Contaminated Indigenous Media. Most contaminated indigenous media generated during the course of an investigation are intrinsic elements and should be managed with other corrective action wastes from the site in the final remedy if possible and practical. This method avoids the necessity for providing separate treatments and disposal arrangements. Indigenous media are not wastes as long as the they remain within the solid waste management unit (SWMU) boundary. Solid contaminated indigenous media are not considered wastes and may be placed back in the SWMU or area of concern (AOC) provided that

   - the media has not crossed the boundary of the SWMU or AOC;
   - the SWMU has not been altered, changing the final remedy;

- the stored material will not enhance the spread of contaminants; and
- all of the following protectiveness factors (EPA 1992) have been considered and decisions made using best professional judgment:
  - the contaminants, concentrations, and total volume of media;
  - location of nearest populations and degree of access;
  - potential exposures to workers; and
  - potential for environmental impacts.

Indigenous contaminated sludge or soil will be returned to its source or stored onsite in containers if short-term protection is not an issue. Non-indigenous media generated at the site during investigations or corrective actions, such as PPE, sampling materials, and decontamination fluids will not be stored and treated in the final remedy unless provisions and approvals have been reviewed and approved. This provision has been made because risks to human health and the environment from the indigenous contaminated media will be addressed by the final action.

Solid contaminated media must not be placed back in the SWMU or AOC if

- the media have left the SWMU or AOC boundary;
- the source of the media is a borehole in hydraulic communication with groundwater or surface water; or
- the media could be construed to be refuse in a water course or cause contaminants to reach surface water.

Contaminated water meeting hazardous or radioactive criteria must be placed in containers and managed as hazardous or radioactive waste with the attendant labels and time constraints, as applicable.

B. Uncontaminated Indigenous Media. Displaced uncontaminated solid indigenous media must be segregated from material that is contaminated to prevent contamination, which would generate additional waste that must be handled pursuant to legal requirements.

Purged well water that is known to be uncontaminated may be discharged to the ground surface if all the agreements between ESH-18 and the State of New Mexico have been met. Notify ESH-18 of the proposed discharge, how much is to be discharged, dates of discharge, and area of discharge. If ESH-18 has not approved the

proposed discharge before purging is to commence, the water must be placed in a container until approval is received.

6.3.6 Regulated Chemical Waste

Wastes containing PCBs or meeting the definition of New Mexico Special Waste must be segregated, if practical, from other waste streams. More information is provided in ARs 10-3, Hazardous and Mixed Waste and 10-4, Polychlorinated Biphenyls. Notify the Operations and Maintenance Services (FSS-9) site coordinator to arrange for the support contractor to package, label, and transport asbestos waste off-site. If segregation is not possible, characterize and document all waste categories present in the waste. Waste Services will assist the waste generator regarding the handling of special wastes.

6.3.7 Municipal Refuse Waste

Waste generated outside the exclusion or contamination reduction zones (e.g., food items and wrappers, paper) can be disposed of as municipal refuse waste. Uncontaminated items must be segregated from any contaminated items and kept away from areas of potential contamination. Store the uncontaminated items in plastic bags or lined garbage bins, and label the bags or bins as municipal refuse to prevent the inadvertent confusion or mixing of this waste with contaminated waste.

6.4 Waste Disposal

CST-5 can accept some wastes for disposal; they can manage the waste until an offsite contractor can accept the waste; or they can refer the generator to a licensed facility with whom the Laboratory has a disposal agreement. The WCSF provides CST-5 with the information it requires to arrange for disposal on-site or off-site as well as information for the waste characterization program. Be familiar with the CST Waste Acceptance Criteria (WAC), follow the instructions, and arrange for storage containers that will be accepted by CST-5.

Complete the following forms:

- The WCSF, which must be completed and approved for all ER Project waste **before** the waste is generated. Follow LANL-ER-SOP-1.10.
- The WPF, which must be completed for all wastes and submitted to for CST 5 review and approval. Follow AR 10-9, Waste Profile Form, for completion of the WPF. CST-5 provides the WPF reference number on the WPF that must be used on the CWDR form.
- The CWDR form, which must use the WPF reference number. Submit the CWDR to CST-5, who will then make the arrangements for removal of the

waste from the site. Allow adequate time for the waste to be removed before the end of the storage term.

If CST-5 instructs a field team to participate directly with an off-site disposal provider, the field team will follow instructions provided by CST-5 for all the waste management procedures, sampling, and documentation that is required.

6.4.1 Hazardous Waste

CST, as a hazardous waste storage facility, has stringent requirements regarding waste characterization. Follow the CST WAC for instructions on waste characterization. The WCSFs will notify CST-5 of the types and amounts of hazardous waste that must be managed by CST-5.

6.4.2 Low-Level Radioactive Waste

Follow the CST WAC for instructions on waste characterization (e.g., whether field instruments provide adequate information, or how many samples per volume must be taken). Follow the guidelines in LANL-ER-SOP-01.03 for instructions on preparation of packages for shipping. The radiation control technician is required to take external readings from the surface of each package of low-level radioactive material being shipped and to record the information on the CWDR Form.

6.4.3 TRU Waste

Disposal is not available for TRU waste, and storage capacity is limited. Follow the guidance in AR 10-5, TRU Solid Waste, and contact CST-14 for assistance if you expect to generate TRU waste.

6.4.4 Mixed Waste

Disposal for large amounts of mixed waste is not readily available. Contact CST-5 for assistance if you expect to generate mixed waste. **Do not generate mixed waste without prior notification to CST-5.**

6.4.5 Indigenous Media

A. Contaminated Indigenous Media. Contaminated indigenous media must be disposed of pursuant to the requirements for the type of contaminant, except for investigation-derived solid media. This contaminated media may be returned to the original SWMU or AOC provided that the conditions set in Section 6.2.5.A of this document have been met.

Contaminated water must be disposed of as appropriate for the type of waste, including preparation, review, and approval of all forms.

B. Uncontaminated Indigenous Media. Uncontaminated water may be discharged to the ground surface, provided that all the conditions noted in Section 6.2.5.B are met. Uncontaminated solid media may be returned to the area of origin, or it may be offered for beneficial use.

6.4.6 Regulated Chemical Wastes

CST-5 manages the disposal of regulated wastes, either by on-site disposal at TA-54 or by having contractors remove the waste. Submit the CWDR to CST-5 to have this waste removed from the site.

6.4.7 Municipal Refuse Waste

Sanitary waste that can be disposed of at a municipal landfill should be taken there directly by a field team member. Present a completed WPF and a statement stating the type and amount of waste to the Los Alamos County Landfill Manager at time of disposal.

6.5 Waste Treatment

On-site treatment and treatability studies of ER-generated wastes may be conducted, including stabilization, aeration, and use of certain biological methods. Be sure to contact CST-5 and ESH-19 before the treatment or study is begun, because many requirements are in place regarding the management of such treatments. A few requirements are listed in the following paragraphs.

Treatment must be conducted within a <90-day storage area in a tank that is provided with secondary containment. Tanks used for the treatment of hazardous waste must meet the requirements in 40 CFR 264.192 through 264.199, Subpart J, Tank Systems. A Waste Treatment Report Form must be completed and sent to NMED 30 days prior to the treatment; since ESH-19 is the Laboratory group that interacts with NMED on waste treatment, the Waste Treatment Report Form must be sent to ESH-19, who will submit it to the state. The report form includes the description of the waste type, RCRA codes, radioactivity, quantity of waste, and final disposition.

For treatability studies, NMED must be notified in writing no less than 45 days before the study is conducted, and studies must be conducted in accordance with 40 CFR 265.4(e and f). The treatability study project description document must be sent to ESH-19 for submission to NMED. The amount of waste treated cannot exceed 250 kg/day, and the total amount of material at the Laboratory being used for treatability studies cannot exceed 1000 kg.

7.0 REFERENCES

CST, December 1, 1994, "CST Waste Management Facilities Waste Acceptance Criteria and Certification," WASTEMGMT-PLAN-002, R0, Los Alamos National Laboratory, Los Alamos, New Mexico.

CST, 1995, "Justification of Characterization Strategies for Waste Generated by the Environmental Restoration Project," AP-CST14G-004, R.1, Los Alamos National Laboratory, Los Alamos, New Mexico.

EPA (US Environmental Protection Agency), July 1, 1994, Code of Federal Regulations, Title 40, Environment; Subchapter I, Solid Wastes, Washington, DC.

EPA (US Environmental Protection Agency), April 1992, Guide to Management of Investigation-Derived Wastes, 9345.3-03FS, Washington, DC.

LANL (Los Alamos National Laboratory), September 19, 1994, "Final RMMA Program Plan – Radioactive Materials Management Area (RMMA)," PP-01.0, Los Alamos, New Mexico.

LANL (Los Alamos National Laboratory), "Los Alamos National Laboratory Environmental Restoration Program Standard Operating Procedures," Los Alamos National Laboratory report, Los Alamos, New Mexico.

- LANL-ER-SOP-01.03, Handling, Packaging, and Shipment of Samples
- LANL-ER-SOP-01.04, Sample Control and Field Documentation
- LANL-ER-SOP-10.07, Field Monitoring for Surface and Volume Radioactivity Levels
- LANL-ER-SOP-01.10, Waste Characterization

LANL (Los Alamos National Laboratory), "The Laboratory Manual—Environment, Safety, and Health," Los Alamos, New Mexico.

- AR 6-6, Explosives
- AR 10-1, Radioactive Liquid Waste
- AR 10-2, Low-Level Radioactive Solid Waste
- AR 10-3, Hazardous and Mixed Waste
- AR 10-4, Polychlorinated Biphenyls
- AR 10-5, Transuranic (TRU) Solid Waste
- AR 10-8, Waste Minimization
- AR 10-9, Waste Profile Form

LANL (Los Alamos National Laboratory), September 1993, Spill Prevention Control and Countermeasures Plan, R3, Los Alamos, New Mexico

8.0 RECORDS

Required documentation generated during the preparation and management of waste is kept in the Laboratory's records systems. CST-14 and CST-5 are required to keep records of wastes that have been processed through their system, including the WCSF, WPF, CWDR, and Shipping Manifests. ESH-19 is required to keep records of <90-day storage areas, including inspection information. ESH-18 is required to keep records of discharges. These records are part of the ER records, but their presence is not required in the Records Processing Facility.

Records kept in the Daily Activity Log or the Logbook, per LANL-ER-SOP-1.04, are submitted to the Records Processing Facility according to instructions in that procedure. The FPL must ensure that all records are submitted to the appropriate places.

9.0 ATTACHMENTS

N/A